

AMENDMENTS

Amendments to the Specification

1. Please replace the paragraph starting on page 4, line 2 with the following paragraph:

Figure 1 is a schematic representation of the TeTx and the DNA construct (pMAL-LC) used to express the MBP-L chain fusion proteins. Figure 1A shows the nucleotide sequence (SEQ ID NO: 14) and amino acid sequence (SEQ ID NO: 10) ~~The single-letter code in the first part of the figure represents the amino acid sequence of the first several residues of the purified recombinant L chain and Ala²³⁴-L chain determined by N-terminal microsequencing.~~ Figure 1B ~~The second part of the figure shows the H chain is disulfide bonded to the L chain. The location of the zinc-binding domain is also diagrammed for the wild type LC (SEQ ID NO: 15) and the Ala²³⁴-LC (SEQ ID NO: 16).~~

2. Please replace the paragraph starting on page 4, line 23 with the following paragraph:

Figure 5 is a schematic representation of the recombinant BoNT/A light chain expression construct, pCAL. This was produced by insertion of the L chain gene between the BamHI and Sall restriction sites at the polylinker of the vector pMAL-c2. The vector contains the inducible P_{tac} promoter positioned to transcribe the *malE-LacZ α* gene fusion. The *lacI^q* gene encodes the lac repressor which represses transcription from P_{tac} until induction by isopropyl β -D-thiogalactoside (IPTG). The *rrnB* terminator prevents transcription from interfering with plasmid replication. Amp^r encodes β -lactamase for ampicillin resistance. M13-ori and pBR322ori indicate the origins of DNA replication. The Factor X_a cleavage site and L chain start are denoted by arrows. The nucleotide sequence (SEQ ID NO: 17) and the encoded amino acid sequence (SEQ ID NO: 18) are shown.

3. Please replace the paragraph starting on page 4, line 34 with the following paragraph:

Figure 6 shows the recombinant SNAP-25 substrate for BoNT/A and presents graphic results from a cleavage assay developed by Western blotting. (A) Schematic representation of the C-terminal fragment of SNAP-25 encompassing the BoNT/A

cleavage site, against which a polyclonal antibody was raised and the peptide antigen (SEQ ID NO: 11). (B). Graph of the numerical values obtained from densitometric scanning of Western blots. Reduced native BoNT/A (•) and recombinant wild-type L-chain (○) effectively cleaved SNAP-25, while the Tyr²²⁷ mutant was devoid of proteolytic activity (—).